

AMENDMENTS TO THE CLAIMS

Please cancel claims 11, 22, 32 and 42, resulting in the following listing of the claims. This claim listing replaces and supersedes all prior claim listings.

1. (Original) A radio transmission device for transmitting data through a radio line, comprising:

data inputting means for inputting transmission data;

input data storing means for storing the inputted transmission data temporarily;

data compression means for reading data from the data storing means to compress the data; and

data transmitting means for transmitting the compressed data through the radio line.

2. (Original) A radio transmission device according to Claim 1, additionally comprising:

throughput judging means for judging throughput in the radio line.

3. (Original) A radio transmission device according to Claim 2, wherein:

said input data storing means is comprised of a memory that operates using a first-in first-out method; and

said throughput judging means judges throughput according to a difference between a data writing location and a data reading location of the input data storing means.

4. (Original) A radio transmission device according to Claim 1, additionally comprising:

compression rate control means for controlling a data compression rate in the data compression means.

5. (Original) A radio transmission device according to Claim 1, additionally comprising:

throughput judging means for judging throughput in the radio line; and

compression rate control means for controlling a data compression rate in the data compression means according to the judged throughput.

6. (Original) A radio transmission device according to Claim 5, wherein:

said compression rate control means increases a data compression rate with a decrease in throughput, and decreases the data compression rate with recovery of the throughput.

7. (Original) A radio transmission device according to Claim 1, additionally comprising:

input speed control means for controlling data input speed in the data inputting means.

8. (Original) A radio transmission device according to Claim 1, additionally comprising:

throughput judging means for judging throughput in the radio line; and

input speed control means for controlling data input speed in the data inputting means according to the judged throughput.

9. (Original) A radio transmission device according to Claim 8, wherein:

said input speed control means decreases data input speed with a decrease in throughput, and increases the data input speed with recovery of the throughput.

10. (Original) A radio transmission device according to Claim 1, wherein:

said data transmitting means performs best-effort-type packet transmission, which responds to a retransmission request.

11. (Cancel).

12. (Original) A radio transmission method for transmitting data through a radio line, comprising the steps of:

a data inputting step for inputting transmission data;

an input data storing step for storing the inputted transmission data temporarily;

a data compression step for reading data from the data storing means to compress the data; and

a data transmitting step for transmitting the compressed data through the radio line.

13. (Original) A radio transmission method according to Claim 12, additionally comprising the step of:

a throughput judging step for judging throughput in the radio line.

14. (Original) A radio transmission method according to Claim 13, wherein:

in the input data storing step, data is written and read by means of a first-in first-out method; and

in the throughput judging step, throughput is judged according to a difference between a data writing location and a data reading location of the input data storing step.

15. (Original) A radio transmission method according to Claim 12, additionally comprising the step of:

a compression rate control step for controlling a data compression rate in the data compression step.

16. (Original) A radio transmission method according to Claim 12, additionally comprising the steps of:

a throughput judging step for judging throughput in the radio line; and

a compression rate control step for controlling a data compression rate in the data compression step according to the judged throughput.

17. (Original) A radio transmission method according to Claim 16, wherein:

in the compression rate control step, a data compression rate is increased with a

decrease in throughput, and the data compression rate is decreased with recovery of the throughput.

18. (Original) A radio transmission method according to Claim 12, additionally comprising the step of:

an input speed control step for controlling data input speed in the data inputting step.

19. (Original) A radio transmission method according to Claim 12, additionally comprising the steps of:

a throughput judging step for judging throughput in the radio line; and

an input speed control step for controlling data input speed in the data inputting step according to the judged throughput.

20. (Original) A radio transmission method according to Claim 19, wherein:

in the input speed control step, data input speed is decreased with a decrease in throughput, and the data input speed is increased with recovery of the throughput.

21. (Original) A radio transmission method according to Claim 12, wherein:

in the data transmitting step, best-effort-type packet transmission, which responds to a retransmission request, is performed.

22. (Cancel).

23. (Original) A radio receiving device for receiving data through a radio line, comprising:

data receiving means for receiving compressed data through the radio line;

data decompressing means for decompressing the received data;

output data storing means for storing the decompressed data temporarily; and

data outputting means for reading data from the output data storing means to output the data.

24. (Original) A radio receiving device according to Claim 23, additionally comprising:

throughput judging means for judging throughput in the radio line.

25. (Original) A radio receiving device according to Claim 24, wherein:

said output data storing means is comprised of a memory that operates using a first-in first-out method; and

said throughput judging means judges throughput according to a difference between a data writing location and a data reading location of the output data storing means.

26. (Original) A radio receiving device according to Claim 23, wherein:

said data receiving means receives a compression rate parameter applied to transmission data; and

said data decompressing means performs data decompression processing

according to the compression rate parameter.

27. (Original) A radio receiving device according to Claim 23, additionally comprising:

output speed control means for controlling data output speed in the data outputting means.

28. (Original) A radio receiving device according to Claim 27, wherein:

said data outputting means records data, which has been read from the output data storing means, on a given storage medium; and

said output speed control means controls data recording speed for recording on the storage medium.

29. (Original) A radio receiving device according to Claim 23, additionally comprising:

throughput judging means for judging throughput in the radio line; and

output speed control means for controlling data output speed in the data outputting means according to the judged throughput.

30. (Original) A radio receiving device according to Claim 29, wherein:

said output speed control means decreases data output speed with a decrease in throughput, and increases the data output speed with recovery of the throughput.

31. (Original) A radio receiving device according to Claim 23, wherein:

said data receiving means performs best-effort-type packet transmission that issues a retransmission request in response to occurrence of a packet receiving error.

32. (Cancel).

33. (Original) A radio receiving method for receiving data through a radio line, comprising the steps of:

a data receiving step for receiving compressed data through the radio line;

a data decompressing step for decompressing the received data;

an output data storing step for storing the decompressed data temporarily; and

a data outputting step for reading data, which has been stored temporarily, to output the data.

34. (Original) A radio receiving method according to Claim 33, additionally comprising the step of:

a throughput judging step for judging throughput in the radio line.

35. (Original) A radio receiving method according to Claim 34, wherein:

in the output data storing step, data is stored by means of a first-in first-out method; and

in the throughput judging step, throughput is judged according to a difference between a data writing location and a data reading location of the output data storing step.

36. (Original) A radio receiving method according to Claim 33, wherein:

in the data receiving step, a compression rate parameter applied to transmission data is received; and

in the data decompressing step, data decompression processing is performed according to the compression rate parameter.

37. (Original) A radio receiving method according to Claim 33, additionally comprising the step of:

an output speed control step for controlling data output speed in the data outputting step.

38. (Original) A radio receiving method according to Claim 37, wherein:

in the data outputting step, data, which has been read in the output data storing step, is recorded on a given storage medium; and

in the output speed control step, data recording speed for recording on the storage medium is controlled.

39. (Original) A radio receiving method according to Claim 33, additionally comprising the steps of:

a throughput judging step for judging throughput in the radio line; and

an output speed control step for controlling data output speed in the data outputting step according to the judged throughput.

40. (Original) A radio receiving method according to Claim 39, wherein:

in the output speed control step, data output speed is decreased with a decrease in throughput, and the data output speed is increased with recovery of the throughput.

41. (Original) A radio receiving method according to Claim 33, wherein:

in the data receiving step, best-effort-type packet transmission, which issues a retransmission request in response to occurrence of a packet receiving error, is performed.

42. (Cancel).

43. (Original) A radio transmitting/receiving system for transmitting data through a radio line, comprising:

a radio transmission unit comprising:

data inputting means for inputting transmission data;

input data storing means for storing the inputted transmission data temporarily by means of a first-in first-out method;

data compression means for reading data from the data storing means to compress the data; and

data transmitting means for transmitting the compressed data through the radio line;

a radio receiving unit comprising:

data receiving means for receiving transmission data through the radio line;

data decompressing means for decompressing the received data;

output data storing means for storing the decompressed data temporarily by means of a first-in first-out method; and

data outputting means for reading data from the output data storing means to output the data.

44. (Original) A radio transmitting/receiving system according to Claim 43, additionally comprising:

throughput judging means for judging throughput in the radio line according to a difference between a data writing location and a data reading location of the input data storing means and/or the output data storing means.

45. (Original) A radio transmitting/receiving system according to Claim 43, additionally comprising:

throughput judging means for judging throughput in the radio line;

compression rate control means for controlling a data compression rate in the data compression means according to throughput in the radio line; and

compression rate notifying means for notifying the radio receiving unit of a compression rate parameter that has been used in the data compression means;

wherein:

said data decompressing means performs data decompression processing according to the notified compression rate parameter.

46. (Original) A radio transmitting/receiving system according to Claim 43, wherein:

said compression rate control means increases a data compression rate with a decrease in throughput, and decreases the data compression rate with recovery of the throughput.

47. (Original) A radio transmitting/receiving system according to Claim 43, additionally comprising:

throughput judging means for judging throughput in the radio line; and

input speed control means for controlling data input speed in the data inputting means according to throughput in the radio line.

48. (Original) A radio transmitting/receiving system according to Claim 47, wherein:

said input speed control means decreases data input speed with a decrease in throughput, and increases the data input speed with recovery of the throughput.

49. (Original) A radio transmitting/receiving system according to Claim 43, additionally comprising:

throughput judging means for judging throughput in the radio line; and

output speed control means for controlling data output speed in the data outputting means according to the judged throughput.

50. (Original) A radio transmitting/receiving system according to Claim 49, wherein:

said output speed control means decreases data output speed with a decrease in throughput, and increases the data output speed with recovery of the throughput.

51. (Original) A radio transmitting/receiving system according to Claim 43, wherein:

said data transmitting means and said data receiving means perform best-effort-type packet transmission, by which retransmission is controlled in response to occurrence of a transmission data error.

52. (Original) A storage medium for storing computer software, by which processing of data transmission through a radio line is performed on a computer system, physically in a computer readable form, wherein:

said computer software comprises:

a data inputting step for inputting transmission data;

an input data storing step for storing the inputted transmission data temporarily;

a data compression step for reading data from the data storing means to compress the data; and

a data transmitting step for transmitting the compressed data through the radio line.